EPA Consumption Study Quarterly Update

This document provides a quarterly update covering the second quarter of survey administration, August 1 to October 31, 2012, for the EPA Consumption Study project.

Overview

In the third quarter of the study, we continued administering surveys across all stratifications, as designed. We collected 214 surveys during this period, bringing our total number of survey responses to 586 with the support of 6 surveyors in the field. Our response rate for the quarter was 73%, bringing our overall to-date response rate to 76%. After being out in the field for nine months we continued to see many fewer anglers fishing today than in 1994 (only ¼ the angler population, when comparing similar months of the year). The greatest decline has been in boat anglers, both fishing charters and private boats. When we began the 3rd quarter, the low absolute number of beach-mode responses was a concern. By adjusting our tactics, we were able to catch up in this area, and eliminate the concern. While most of the fishing modes saw a decline in anglers just compared to the previous quarter, we were able to maintain the number of private boat responses. This was made possible by adjusting our tactics and thereby approaching many more anglers than had previously been possible. One significant development has been gaining written support from the Sportfishing Association of California, which will assist us in overcoming the challenge of surveying at fishing charter locations.

Shifts Summary

Quarter 3 (August-September 2012) Results Completed/refused numbers and response rates by month:

August: 54/8 - 87% September: 85/38 - 69% October: 75/33 - 70%

Quarter Overall: 214/79 - 73%

Fishing Mode	YTD Total surveys	Actual # completed surveys (Q3)	Notes
Piers/ Jetties	275	69	Census figures show that fishing at these locations is down 74% since 1994. Response rate for this mode this quarter was 72%. This was lower than the 81% achieved in the previous quarter.
Section	273		Response rate improved from 82% to 85% this quarter. Despite a large drop off in angler population (being out of season for commercial fishing charters), our number of completed surveys was proportionally small. The main reason is we continued the tactic of staffing more surveyors. Census figures show that fishing is down at this mode by an
party boats	178	72	alarming 95% since 1994 (13% more than the

private boats	106	46	previous quarter). Several businesses have folded in the past year, many pointing to the recently enacted Marine Life Protection Act as the cause. Overall (YTD), the number of actual survey responses in this mode is the furthest from initial projections. We have been testing new tactics while surveying in this mode, such as visiting fueling stations, bait shops, and marinas. While it has led to more refusals (and a lowered response rate of 69%), being able to simply approach more people has allowed us to maintain nearly the same number of responses from the previous quarter, despite the significant reduction of angler population in these three months (based on our census counts).
beach/ intertidal	27	21	Response rate continued to be 100% (21 of 21); For the first time in any mode, we surpassed the projected goal (by 4%).
SUBTOTAL	586	208	

Accuracy Screening

During Q2 we implemented accuracy screenings for data entered as a way to ensure data is entered accurately. The accuracy screening has helped identify a few common inconsistencies with how people were inputting data for certain questions. So we've been able to apply a consistent approach to these questions. We have identified trouble spots, and have established ways that has improved team consistency in entering accurate data.

By now, end of Q3, our accuracy rate is 99.999% (only 3 errors out of 2604). In January, we will be going back to the surveys from the first two quarters with errors and re-entering them, ensuring the highest quality data set possible can be passed along for analysis and reporting.

Challenges

The biggest challenge we face continues to be the fact that fewer anglers are fishing. Across all modes, our census numbers are significantly lower than what researchers saw in 1994. Due to the lower number of anglers fishing, we plan to do the following:

- 1) Continue to execute the study as designed: The statistical significance of this study is dependent on careful execution of the stratified study design. The unit we are sampling is survey days to get a representative group of anglers, so the total sample size is less important. Rather, adhering to the surveys days (the survey days are comprised of different variables such as summer vs. non-summer months, weekday vs. weekend, as well as time of day, etc) and keeping the survey days fairly comparable across mode is more important. This will allow us to compare results with the 94 study and see changes over time.
- 2) <u>Increase response rate</u>: Our overall response rate fell this quarter to 76%. A main reason is we are trying new tactics that allow us to approach more people, at the

expense of being refused often. If we can somehow maintain a high rate AND carry out our tactics, we will be able to gather even more responses.

- 3) Reach more anglers: We need to approach more anglers all the while maintaining a relatively high response rate. To reach more anglers we will:
 - a. Continue targeting successful fishing locations and eliminating unsuccessful ones (within the same region as scheduled)
 - b. Participate in fishing charter trips. This has yet to happen, since we only recently received the written letters between Ken Franke, President of SAC, and Judy Huang of EPA to use in our support with skeptical boat captains and landings.
 - c. Send multiple pairs of surveyors out to conduct surveys, allowing them to break off and explore other possible sources of anglers outside the normal range (fueling stations, marinas, other fishing locations, etc), yet still remain within the specified region.